Attorney Docket No.: 915-005.205

Application No.: 10/568,310

IN THE CLAIMS

Please amend claims as follows:

1. (Canceled)

2. (Previously presented) An electrically controlled light modulator device comprising at least one cell, each cell having

two deformable dielectric layers which meet at an interface, at least one of said layers consisting of a viscoelastic relief forming material,

a support electrode structure arranged on one side of the dielectric layers,

a signal electrode structure opposing the support electrode structure such that said layers are located between the support electrode structure and the signal electrode structure,

an enhancement electrode structure composed of one or more separate electrode zones arranged in the proximity of the signal electrode structure,

a signal supplier for applying a signal voltage between said support and signal electrode structures to generate an electric field passing at least partly through the two deformable dielectric layers in order to create a surface relief on the viscoelastic material layer, and

an enhancement signal supplier for applying an enhancement signal voltage between the enhancement electrode structure and the signal electrode structure for enhancing the deformation of the viscoelastic material layer,

wherein the signal electrode and the enhancement electrode structure are capable of storing electrical charges, the enhancement signal supplier being arranged to transfer electric charge between the signal electrode structure and the enhancement electrode structure in a temporally controlled charge transfer process, and

wherein the enhancement signal voltage is generated using substantially only the electrical charge transferred from the signal electrode structure to the enhancement electrode structure.

3. (Cancelled)

4. (Previously presented) The device according to the claim 2, wherein the enhancement signal

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supplier is arranged to discharge at least part of the electric charge stored in the enhancement electrode structure back to the signal electrode structure and/or to the device ground in a temporally controlled manner.

5. (Previously presented) The device according to the claim 2, wherein the temporally controlled charge transfer process comprises a first temporal phase, in which at least part of the electric charge stored in the signal electrode structure is transferred to the enhancement electrode structure.

6. (Previously presented) The device according to the claim 5, wherein the temporally controlled charge transfer process further comprises a second temporal phase, in which at least part of the electric charge stored in the signal electrode structure is discharged without affecting the electrical charge stored in the enhancement electrode structure.

- 7. (Previously presented) The device according to the claim 6, wherein the temporally controlled charge transfer process further comprises a third temporal phase, in which at least part of the electric charge stored in both the signal electrode structure and the enhancement electrode structure is discharged substantially simultaneously.
- 8. (Previously presented) The device according to the claim 2, wherein the enhancement electrode structure and the signal electrode structure are arranged substantially in a single common plane with respect to each other and facing opposite the support electrode structure.
- 9. (Previously presented) The device according to the claim 2, wherein the enhancement electrode structure and the signal electrode structure are arranged in substantially different planes with respect to each other and with respect to the opposite support electrode structure.
- 10. (Previously presented) The device according to the claim 2, wherein multiple cells are arranged into a matrix to form an optical display device.

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11. (Currently amended) A <u>temporally controlled charge transfer process</u> method for use in a light modulating device having at least one cell, comprising:

transferring, in a first temporal phase, at least part of an electrical charge stored in a signal electrode structure of said cell to an enhancement electrode structure of said cell, and

generating an enhancement signal voltage between the enhancement electrode structure and the signal electrode structure using substantially only the electrical charge transferred from the signal electrode structure to the enhancement electrode structure,

wherein the light modulating device comprises at least one cell, said cell having:

two deformable dielectric layers which meet at an interface, at least one of the layers consisting of a viscoelastic relief forming material,

a support electrode structure arranged on one side of the dielectric layers,

the signal electrode structure opposing the support electrode structure such that the

layers are located between the support electrode structure and the signal electrode structure,

the enhancement electrode structure composed of one or more separate electrode zones arranged in the proximity of the signal electrode structure, wherein the signal electrode structure and the enhancement electrode structure are capable of storing electrical charges,

a signal supplier, configured to apply a signal voltage between the support electrode structure and the signal electrode structure, the signal voltage generating an electric field passing at least partly through the two deformable dielectric layers to create a surface relief on the viscoelastic material layer, and

an enhancement signal supplier, configured to apply the enhancement signal voltage between the enhancement electrode structure and the signal electrode structure for enhancing the deformation of the viscoelastic material layer. the signal electrode structure being arranged opposing a support electrode structure of said cell such that two dielectric layers meeting at an interface, at least one of said layers having a viscoelastic relief forming material, are located between the support electrode structure and the signal electrode structure, and the enhancement electrode structure being arranged in the proximity of the signal electrode structure.

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12. (Previously presented) The method of claim 11, further comprising:

discharging, in a second temporal phase, at least part of the electric charge stored in the signal electrode structure without affecting the electric charge stored in the enhancement electrode structure.

13. (Previously presented) The method of claim 12, further comprising:

discharging substantially simultaneously, in a third temporal phase, at least part of the electric charge stored in both the signal electrode structure and the enhancement electrode structure.

14. (Currently amended) A light modulating device having at least one cell, <u>comprisingeach</u> cell having:

two deformable dielectric layers which meet at an interface, at least one of the layers consisting of a viscoelastic relief forming material,

a support electrode structure arranged on one side of the dielectric layers,

a signal electrode structure opposing the support electrode structure such that the layers are located between the support electrode structure and the signal electrode structure,

an enhancement electrode structure composed of one or more separate electrode zones arranged in the proximity of the signal electrode structure, wherein the signal electrode structure and the enhancement electrode structure are capable of storing electrical charges,

a signal supplier, configured to apply a signal voltage between the support electrode structure and the signal electrode structure, the signal voltage generating an electric field passing at least partly through the two deformable dielectric layers to create a surface relief on the viscoelastic material layer, and

an enhancement signal supplier, configured to apply an enhancement signal voltage
between the enhancement electrode structure and the signal electrode structure for enhancing
the deformation of the viscoelastic material layer,
wherein the light modulating device comprises:

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means for transferring, in a first temporal phase, at least part of a electrical charge stored in thea signal electrode structure of said cell-to thean enhancement electrode structure of said cell, and

means for generating an enhancement signal voltage between the enhancement electrode structure and the signal electrode structure using substantially only the electrical charge transferred from the signal electrode structure to the enhancement electrode structure.

wherein the signal electrode structure being arranged opposing a support electrode structure of said cell such that two dielectric layers meeting at an interface, at least one of said layers having a viscoelastic relief forming material, are located between the support electrode structure and the signal electrode structure, and the enhancement electrode structure being arranged in the proximity of the signal electrode structure,

- 15. (Previously presented) The light modulating device of claim 14, further comprising:

 means for discharging, in a second temporal phase, at least part of the electric charge stored in the signal electrode structure without affecting the electric charge stored in the enhancement electrode structure.
- 16. (Previously presented) The light modulating device of claim 15, further comprising: means for discharging substantially simultaneously, in a third temporal phase, at least part of the electric charge stored in both the signal electrode structure and the enhancement electrode structure.